

**Blending the tangible and digital to craft new co-designed interactions for museums.**

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# mesSch

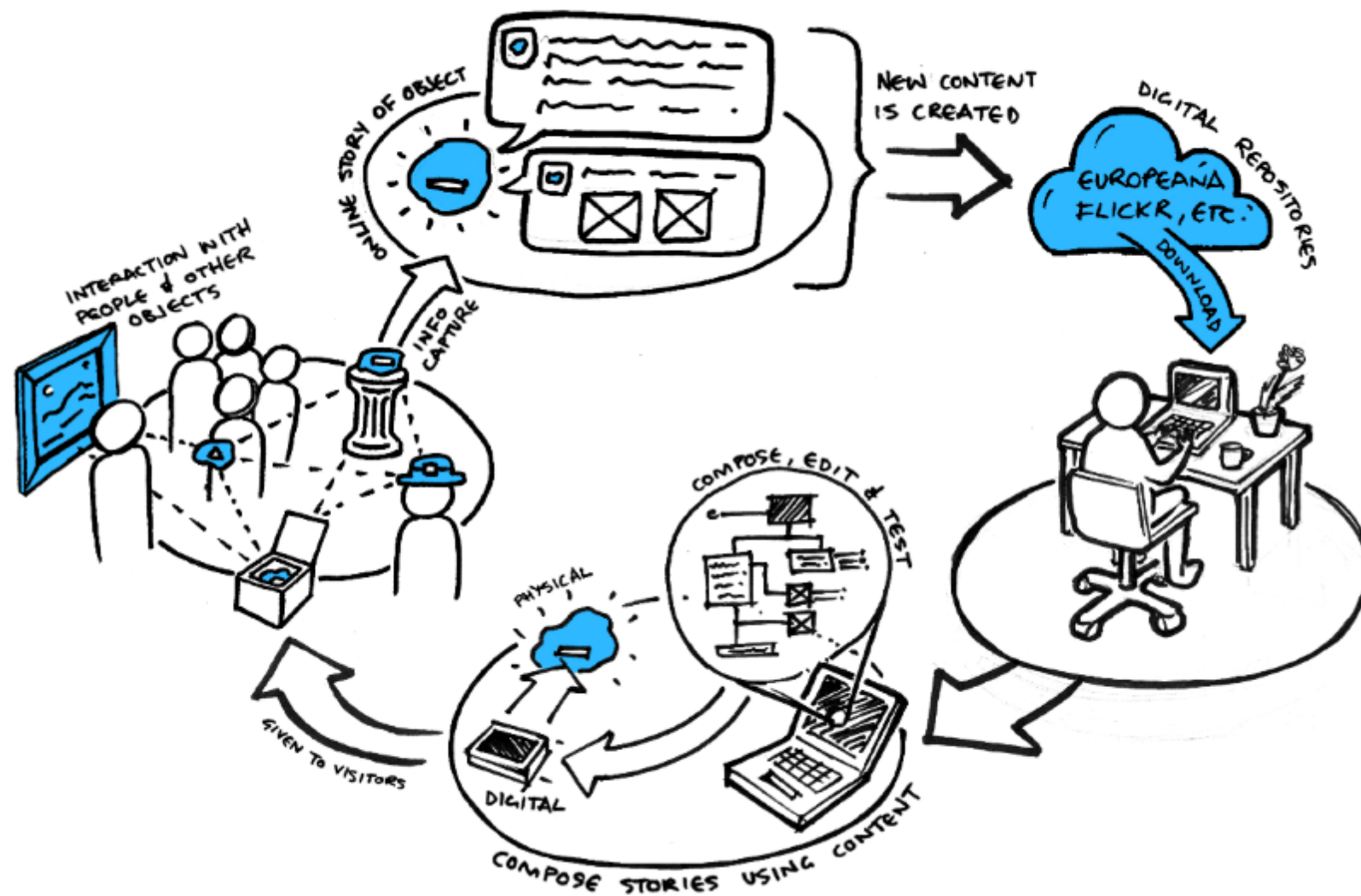
Material Encounters with  
digital Cultural Heritage

**Blending the tangible and digital to craft new  
co-designed interactions for museums.**

Nicholas Dulake

Daniela Petrelli

Sheffield Hallam University



Den Haag en de  
**Atlantik**  
oorlog in de stad  
van vrede **wall**  
vanaf **10 apr**





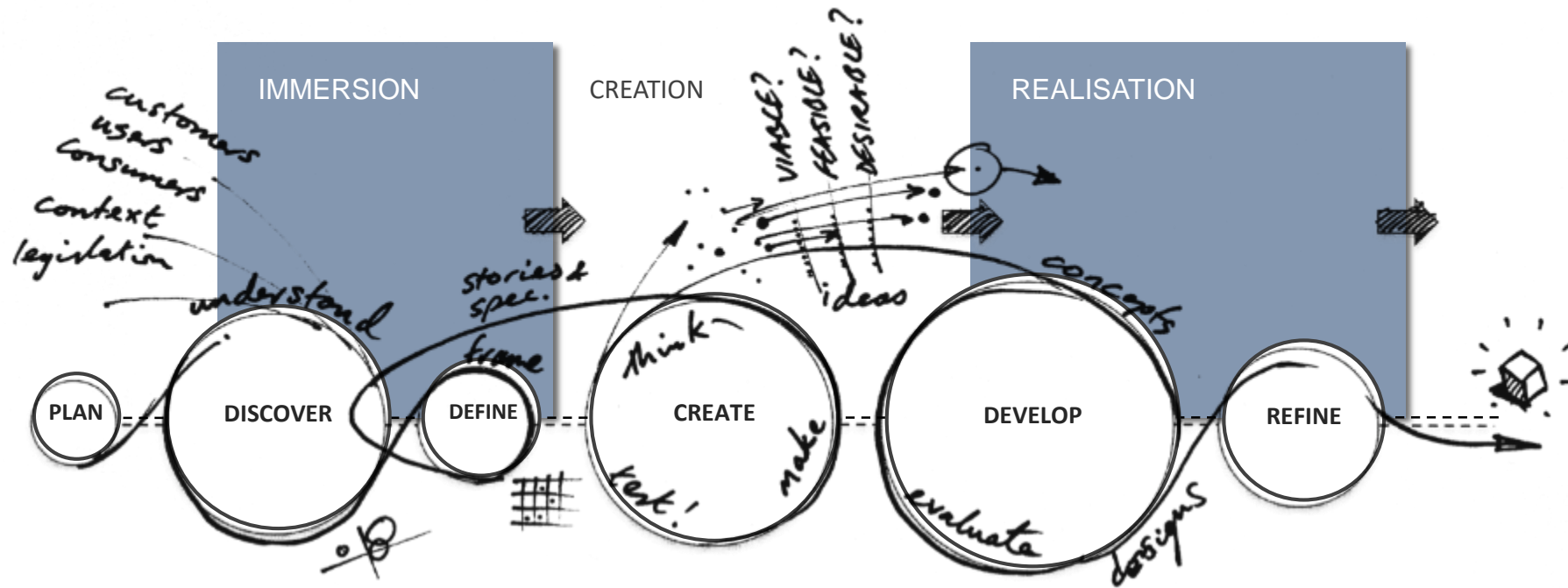


# co-design process





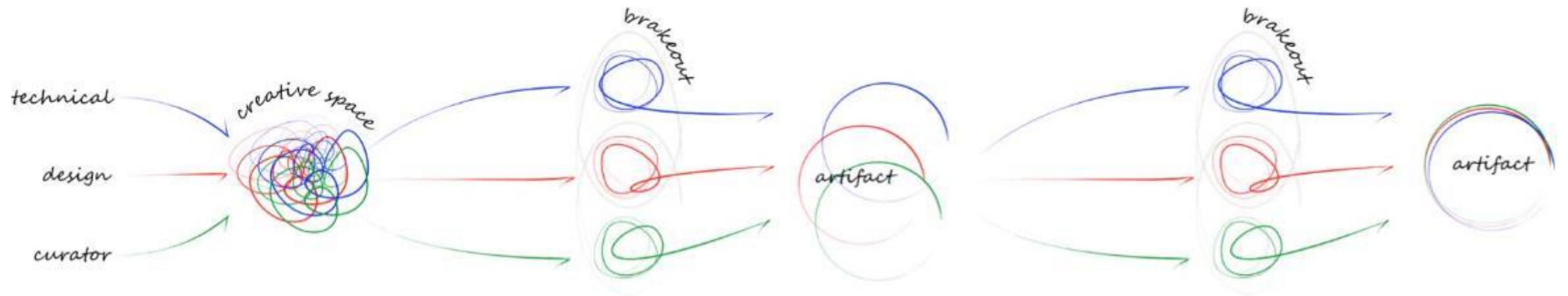
# meSch design process







# meSch artefact focus





Vredespaleis

World Forum

Scheveningse  
bosjes

Scheveningseweg

The Hague and the Atlantikwall

# Inspiration





# co-design



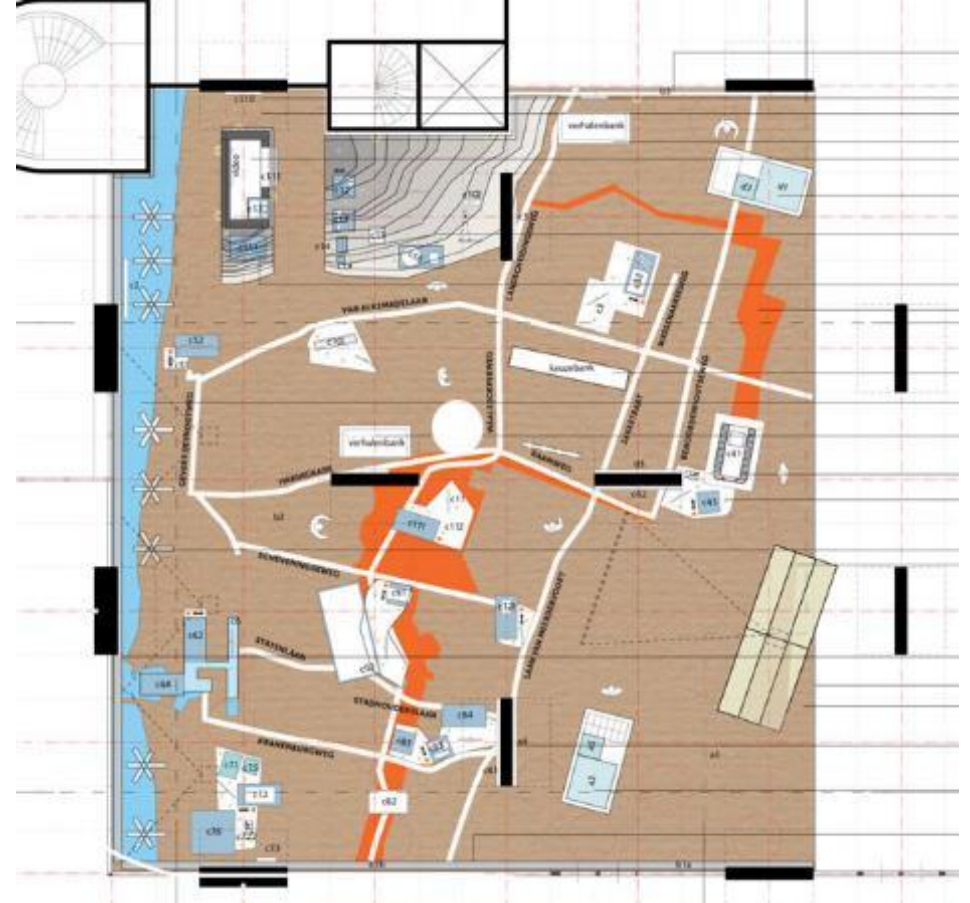
# Overall concept

- Choice between three different perspectives
  - Dutch citizen
  - Civil servant
  - German soldier
- Started by means of a replica
- Sound clips supported by images from archives
- Based on historical resources  
*Archives, newspapers, oral history*
- Choice of language



## Exhibition staring point

- 400 m<sup>2</sup>
- Floor plan reflects The Hague city plan
- Connects past and present
- No fixed route



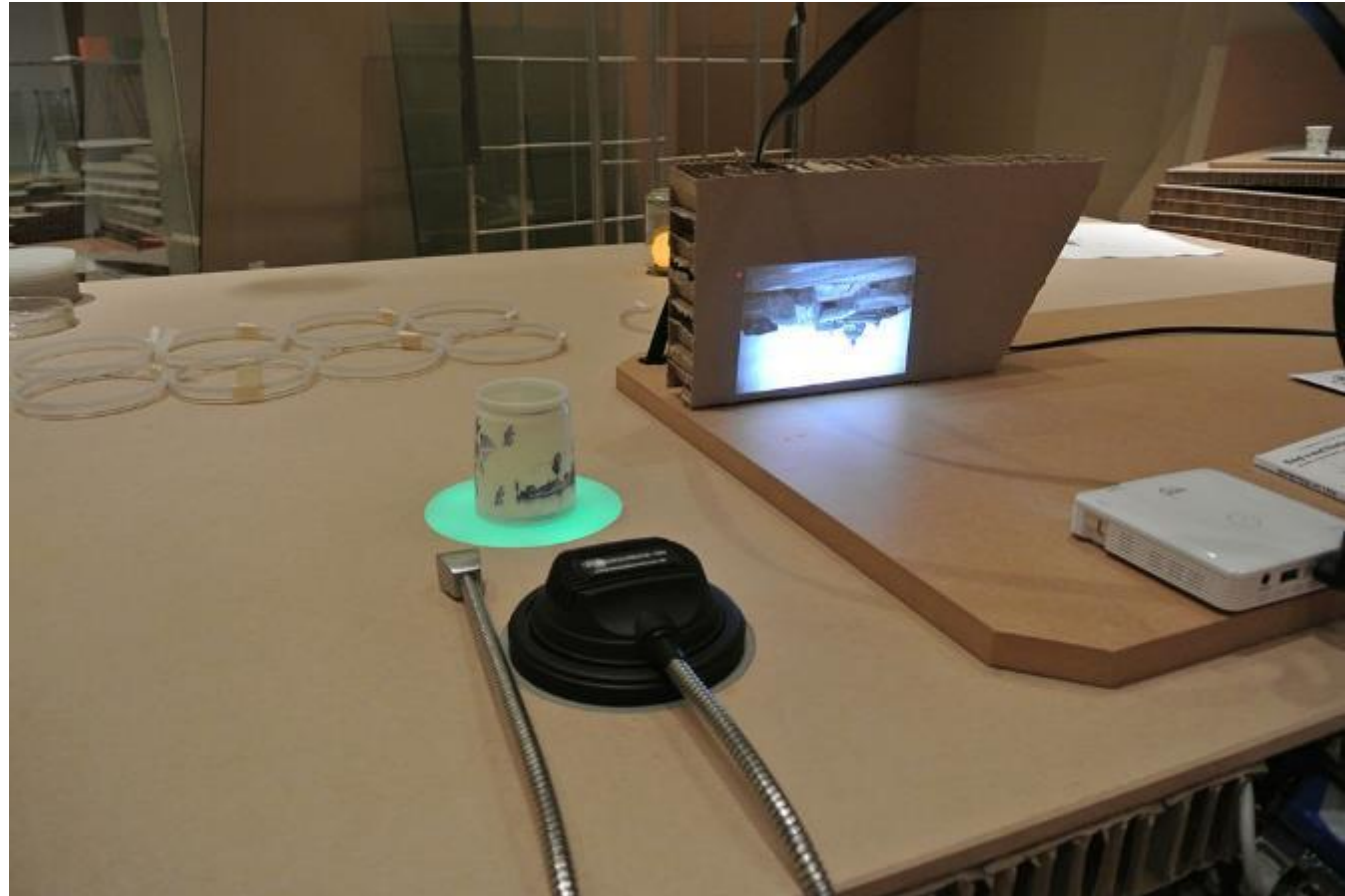
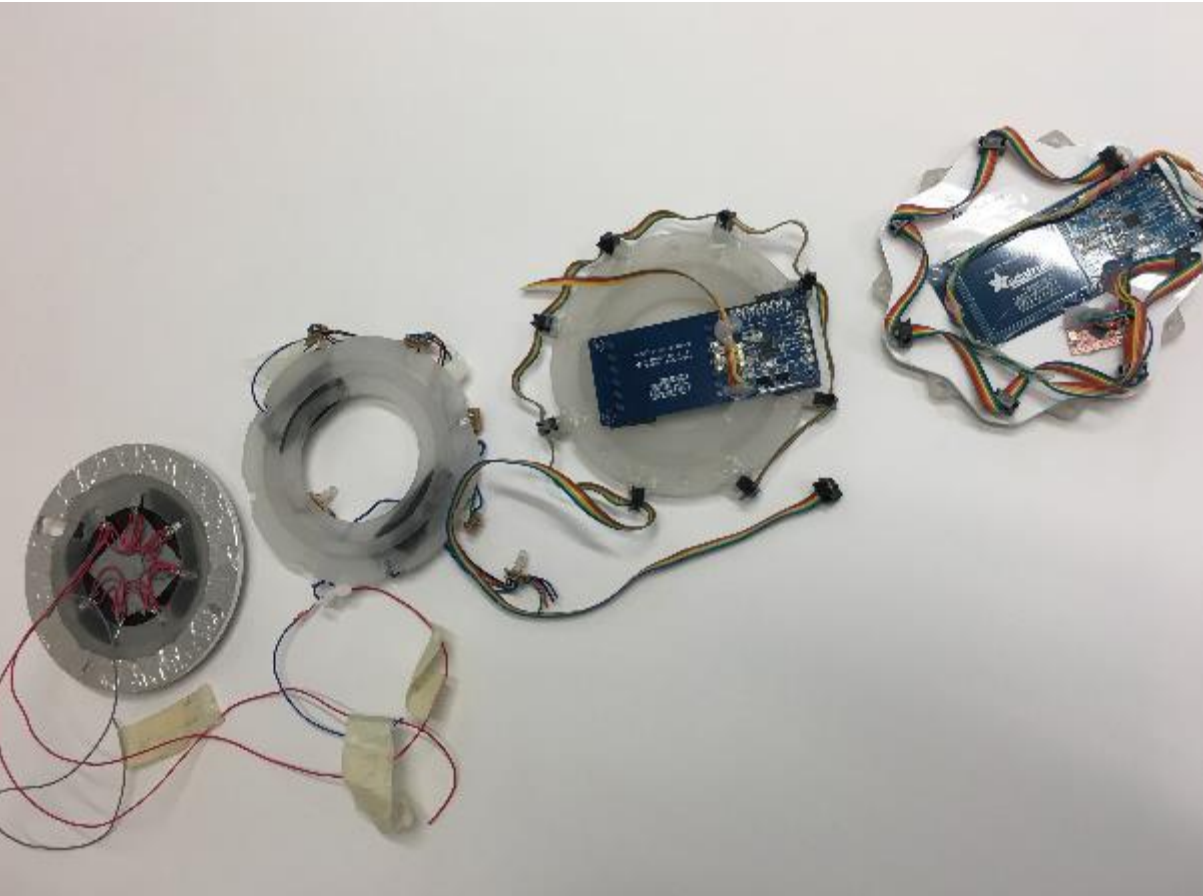
# meSch requirements

- Fully integrated
- Possible to visit the exhibition without meSch technology
- meSch as an additional layer  
*Personal, evocative. Not about facts*
- Connected to real objects  
Take into account noisy environment
- Exhibition design by external company

# Activation hardware



# Activation hardware





# Smart replica



Dieser Ausweis ist nur  
gültig in Verbindung  
mit der Kennkarte  
oder einem sonstigen  
amtlichen Lichtbild-  
ausweis

Diese vergunning is  
slechts geldig indien  
zij tezamen met een  
persoonbewijs of een  
dergelijk van over-  
heidswege afgegeven  
legitimatiepapier,  
waarop een foto van  
den houder voorkomt,  
wordt getoond

Eigenhändige  
Onderschrift

Handtekening  
van den houder

*Spaans*

Form. 122 8462-14-K783  
NADEUK VERBODEN  
RIJSUITGEVER

# SONDERAUSWEIS VERGUNNING

Nr. 1345

Zet- en Voornaam *Frans Corzella Frans*

Naam en Voornaam *Frans Corzella Frans*

Geboren op *24-10-06* te *Wierzbyska*

Geboren op *24-10-06* te *Wierzbyska*

Beroep *Rechtsler*

Woonplaats in (Woonst., Straat en Huisnummer)

Woonplaats in (Gemeente, Straat en Huisnummer)

*Haar* *Thamesstraat 55*

is berechtigd tot doorlichting van alle documenten in de Zet

van *20* Uur tot *4* Uur in *des. Nieuwland*

die Straat te betreden en over te doorkruisen de Weg van de

Ort der Dienstverrichting en der Woning

Houder der r is gerechtigd tot een *20* uur in *des. Nieuwland*

in de gemeente *des. Nieuwland*

in de open lucht te betreden en over te doorkruisen de Weg van de

(i.d.g. v.w.) de plaats van zijn dienstverrichting, ten einde zijn beroepsverrichting

heden te kunnen verrichten

Gedurende de vergunning *14.5.*

De vergunning is geldig tot *14.5.*

Bevestiging der vergunning *14.5.*

Handtekening van den houder *Meister d. Sch. P.*

*Meister d. Sch. P.*

*Meister d. Sch. P.*

## ZOETMIDDEL

INHOUD VAN DIT PAK IS IN  
ZOETMAARDE GELUK AAN 500  
GRAM SUIKER EN BEVAT 2 %  
KUNSTMATIG VERZOETINGS-  
MIDDEL 250% OF 1% 550%



LIMCO'S TROEF

VERVANGT SUIKER  
ZONDER BIJ OF NASMAAK

LIMCO'S  
SUIKERWERKEN  
REINIGING CLAASSENDE  
AMSTERDAM W TEL 60000



# STRASSEN- LAUBNIS



dag e auf Niederländisch  
Deutsch - Niederländisch - Niederländisch - Deutsch











# Kies je verhaal

## Choose your story

nl

Wat betekende de Atlantikwall voor het dagelijks leven in Den Haag? Voor de ambtenaren die de evacuatie, de sloop en - na de bevrijding - de wederopbouw van de stad moesten regelen? En voor de Duitse soldaten, die hier gelegerd waren?

Verdiep je bezoek aan de tentoonstelling. Kies een replica, leg hem op de oranje cirkels naast de vitrines en luister naar de geluidsfragmenten die zijn samengesteld op basis van interviews, historische kranten en archiefstukken.

1 Deze bierpul kregen Duitse soldaten tijdens Kerstmis 1943 als herinnering aan de legering langs de Atlantikwall.

2 De Duitse bezetter had een avondklok ingesteld. Als je na acht uur 's avonds beroepshalve op straat moest zijn, droeg je deze armband.

3 Thee was niet meer verkrijgbaar, maar met ingrediënten als eikels, witlof, appel en krokus viel iets te maken wat op thee leek.

en

What impact did the Atlantic Wall have on everyday life in The Hague? On the officials who had to organise the evacuations, the demolitions and – after the liberation – the reconstruction of the city? And on the German soldiers who were based here?

Get the most out of your visit by choosing a replica and placing it on the orange circles next to the display cases to listen to sound collages drawn from interviews, period newspapers and archive material.

4 This booklet helped German soldiers communicate with the Dutch population.

5 The German occupation authorities had imposed a curfew. If you had professional reasons for being out on the streets after eight o'clock in the evening, you needed a special pass (Sonderausweis).

6 Genuine sugar was in short supply; this was a substitute sweetener.



**en** German perspective  
(English spoken)

**en** official perspective  
(English spoken)

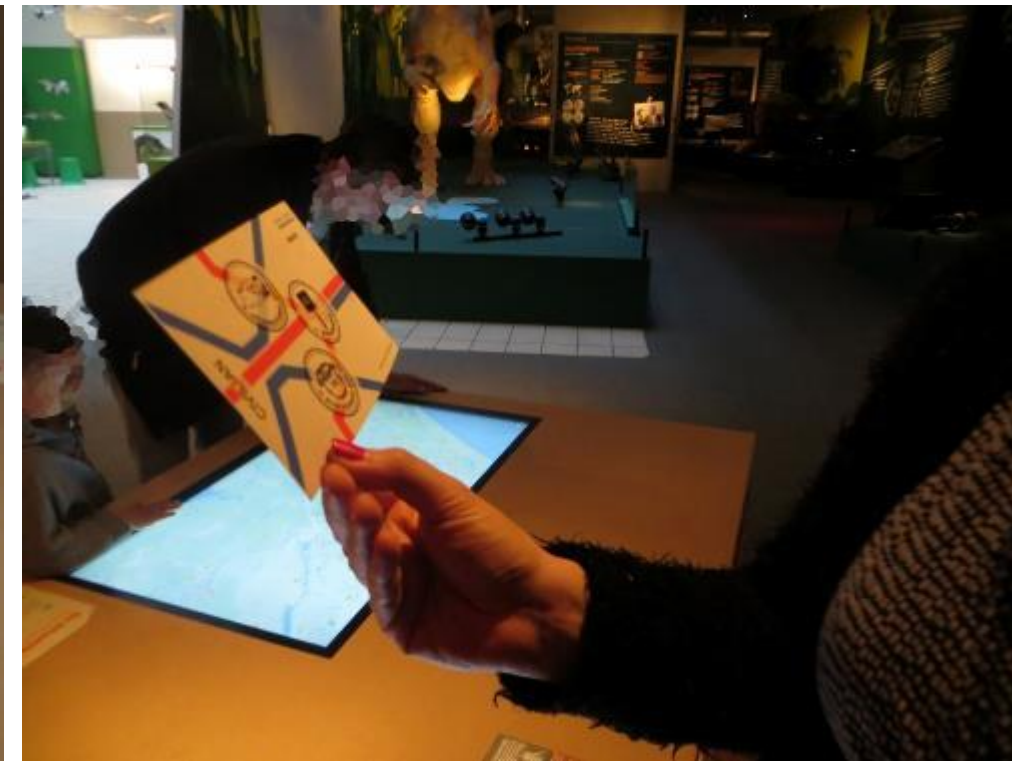


**nl** Ambtenaren ervaringen  
(Nederlands gesproken)

**nl** Burger ervaringen  
(Nederlands gesproken)



# Checkout station





Click on the map to add a new location

### The wartime fishing industry



In the course of 1940/41, the Germans requisitioned all the best boats in the Scheveningen fishing fleet. Only a small number of vessels were allowed to continue fishing and then only under German supervision. They had to stay close in-shore and return to harbour before evening. The aim was to prevent boats and their crews escaping to England. From September 1944, the fleet was confined to port and fishing



Number / Aantal  
[ AFR-187 ]

Turn over for map  
Draai voor de kaart



CIVIL SERVANT





# Evaluation



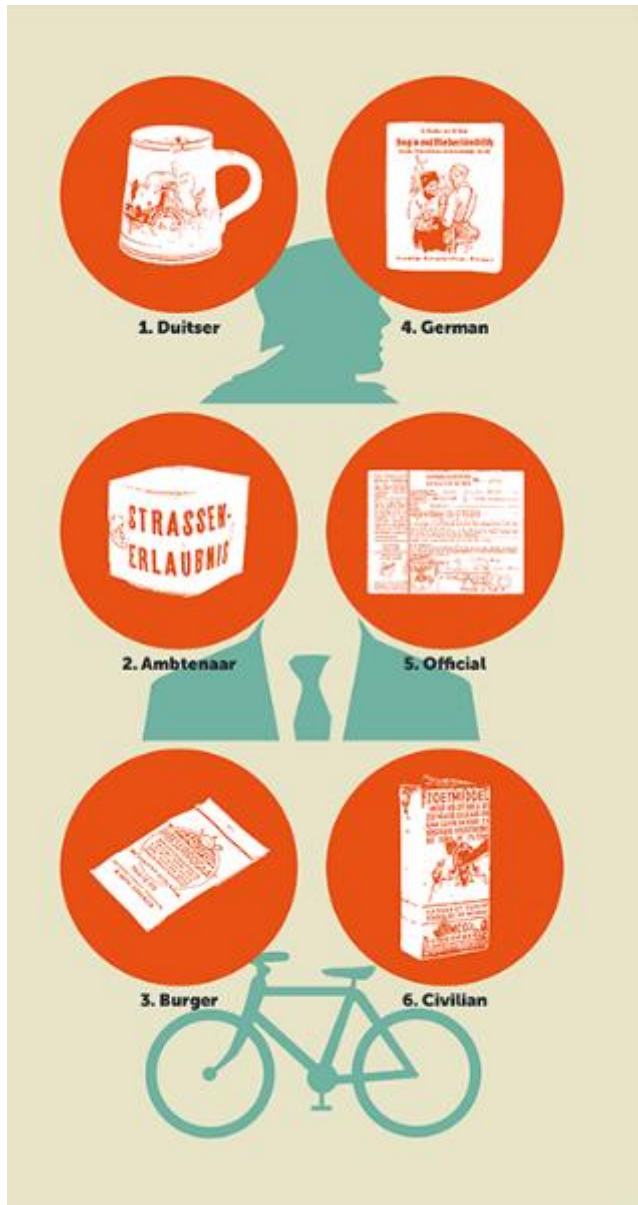
- 4 different cameras over 9 days
- 37 hours and 50 minutes of video captured
- Conversations at the smart replica station



- Total visitor sessions: 14,853 [out of 20,000)
- Average sessions per day: 75
- Peak sessions per day: 187
- Average contents view per session: 48.5%

*10 meSch points with 2 to 3 minutes of contents*





Perspective	Dutch	English	
Soldier	4768	936	<b>5704</b>
Civilian	4484	1769	<b>6253</b>
Civil Servant	2352	544	<b>2896</b>

## Regular visitor study: duration of stay

	Atlantikwall	Ø
< 30 min	15%	10%
30 – 60 min	53%	41%
> 60 min	32%	49%



# Appreciation of replicas

Al-Arab	7.0
Heksen	7.4
Speed	7.7
Scheepvaart	7.8
Wetenschap	7.8
Imitatie	7.8
<b>Atlantikwall</b>	<b>7.8</b>
Plantastic	8.0
LL	8.1
Dino Jaws	8.3
Moordzaken	8.4
High Tech Rom.	8.4
Wildlife 2007	8.4

Use of replicas appreciation: 8.0

No. 236  
Used 58 / 347

No. 296  
Used 303 / 1737

No. 332  
Used 28 / 161



No. 255  
Used 8 / 27

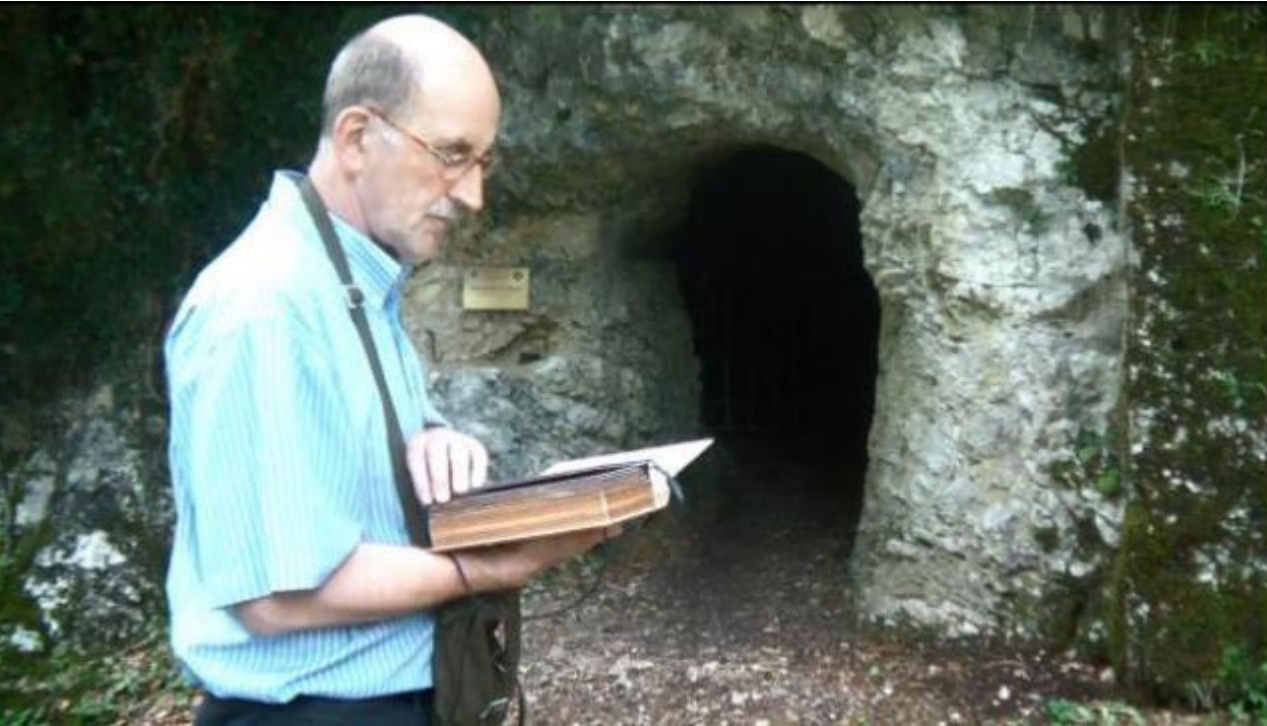


# Fort Pozzacchio





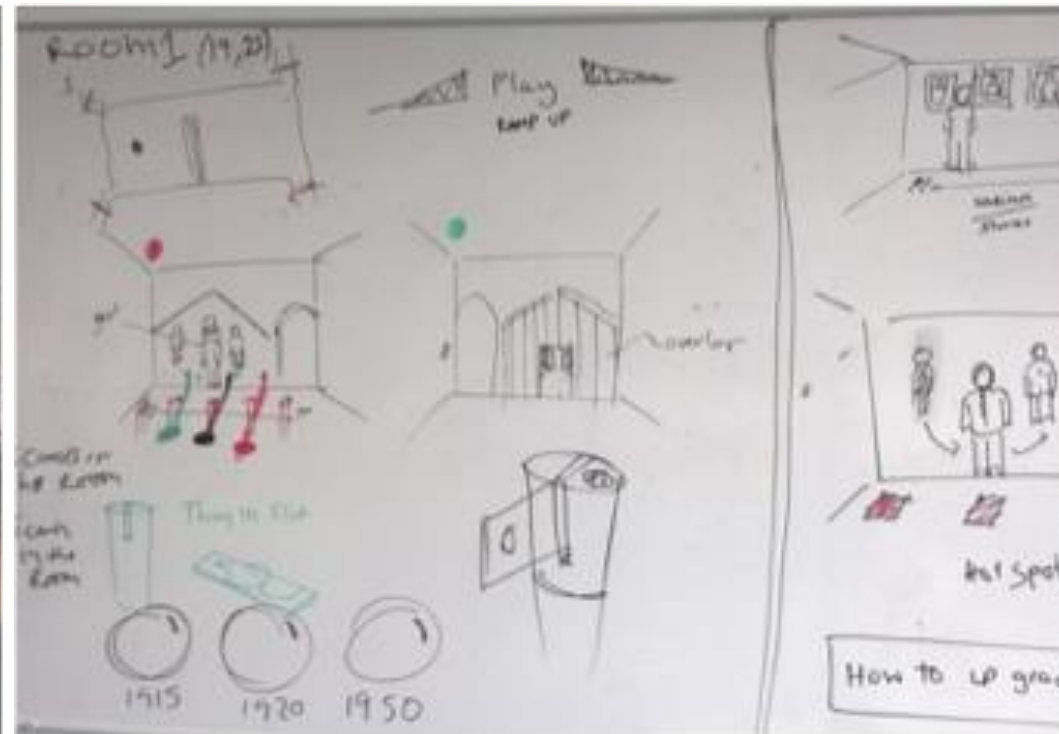
# Inspiration



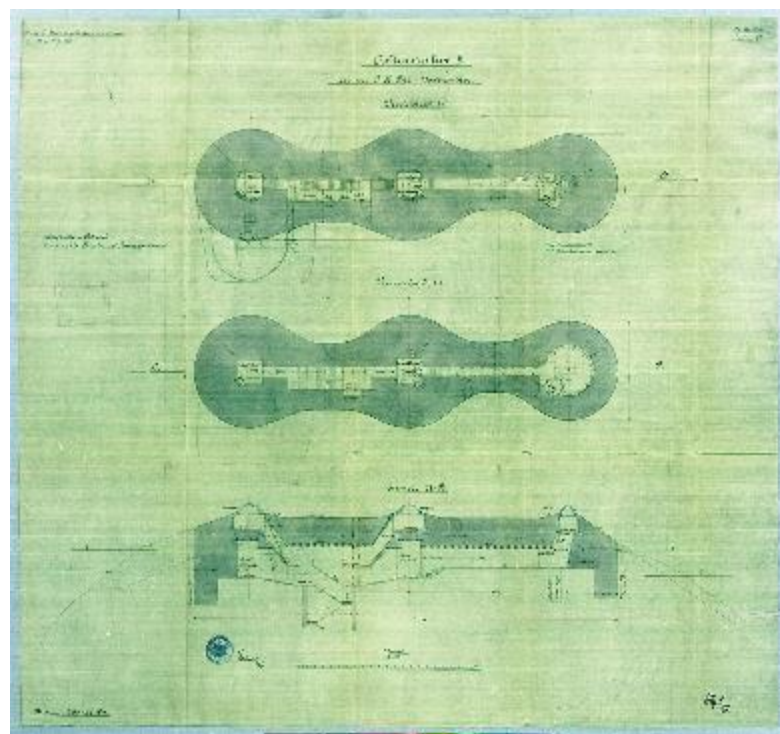




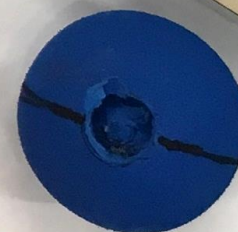
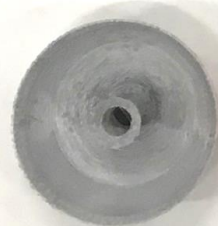
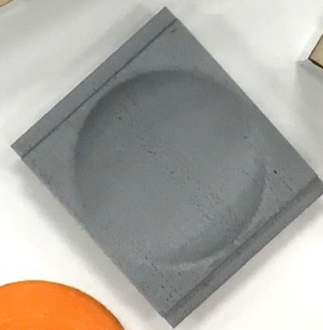
# Concept brainstorming & exploration



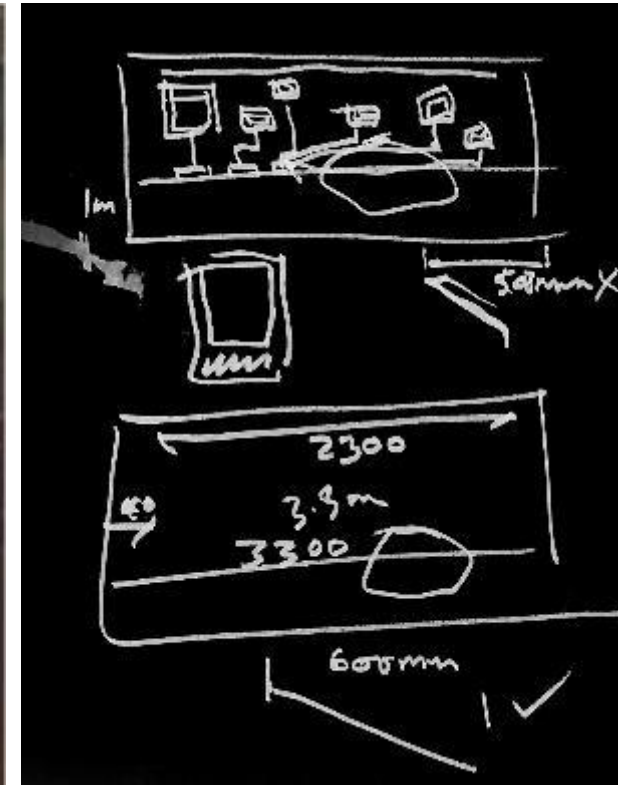




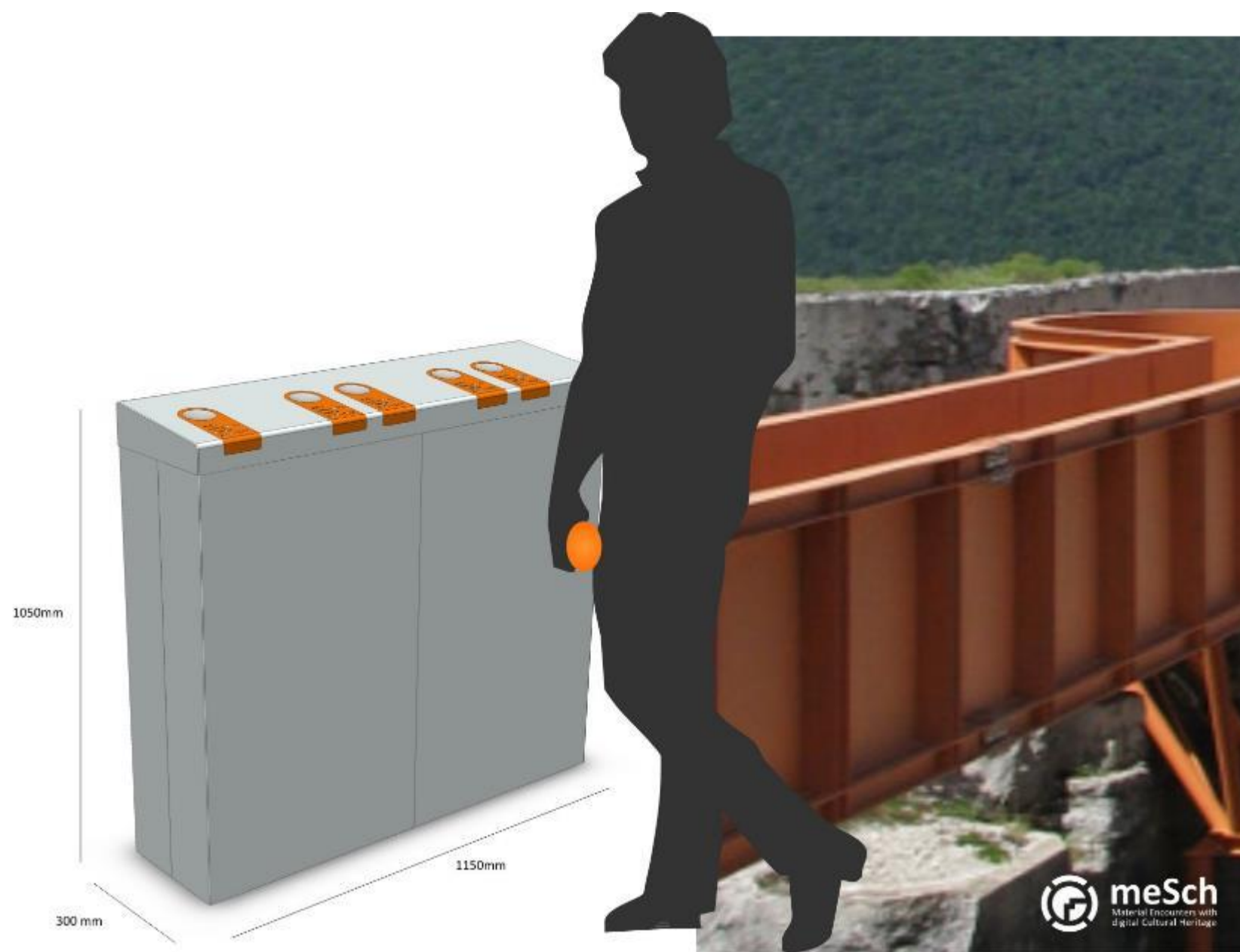


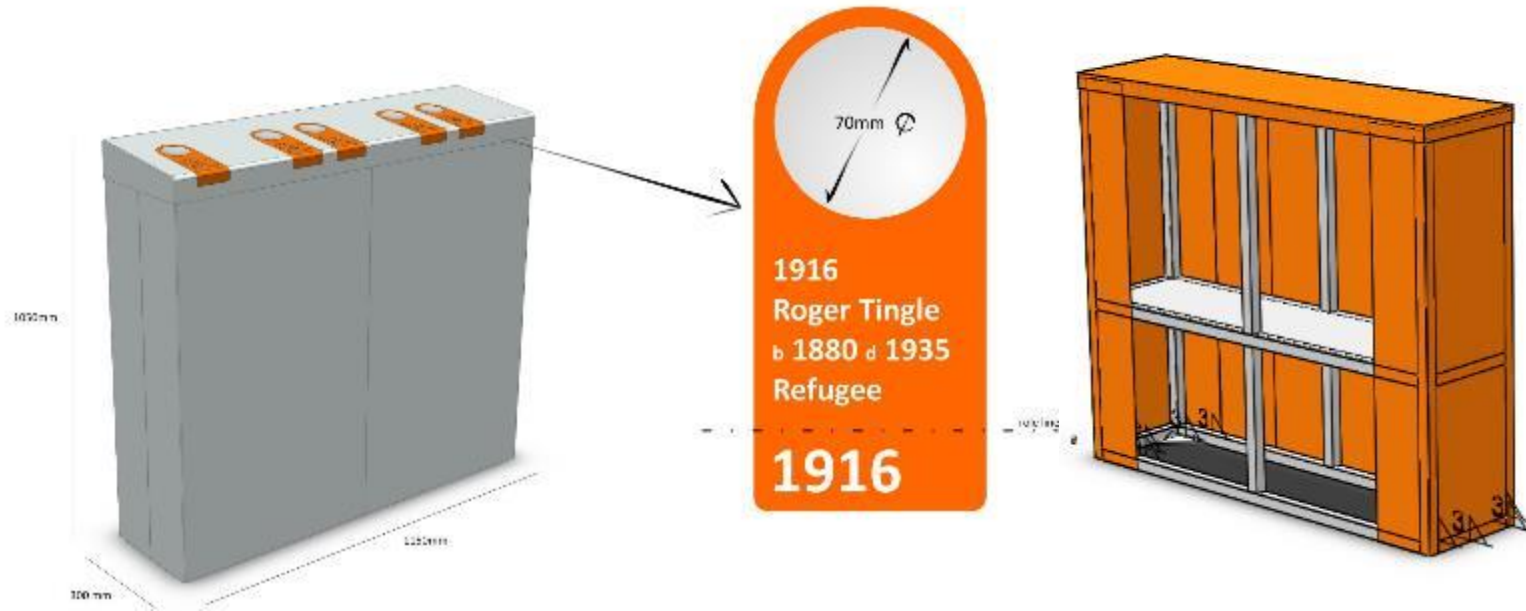


# In-situ testing











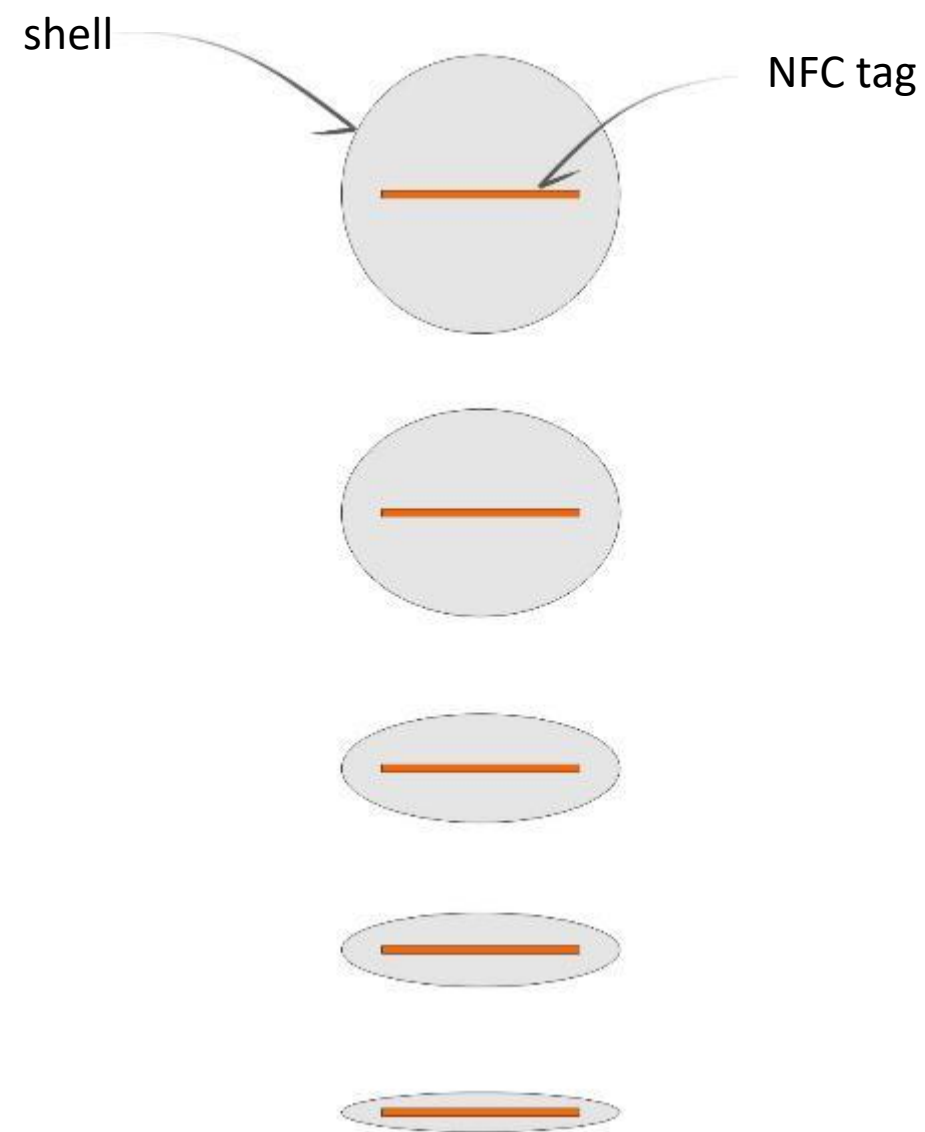


# **“VOCI DAL FORTE DI POZZACCHIO”**

“Sezione Artiglierie della Grande Guerra  
Museo Storico Italiano della Guerra”



**meSch**  
Material Encounters with  
digital Cultural Heritage





**19 MAGGIO 1916**  
Michele Riggio  
ufficiale italiano



**28-29 GIUGNO 1916**  
Adelino Ballarini  
caporale italiano



**28-29 GIUGNO 1916**  
Magnus Hager  
cappellano austro-ungarico



**28-29 GIUGNO 1916**  
Gustav Linert  
ufficiale austro-ungarico

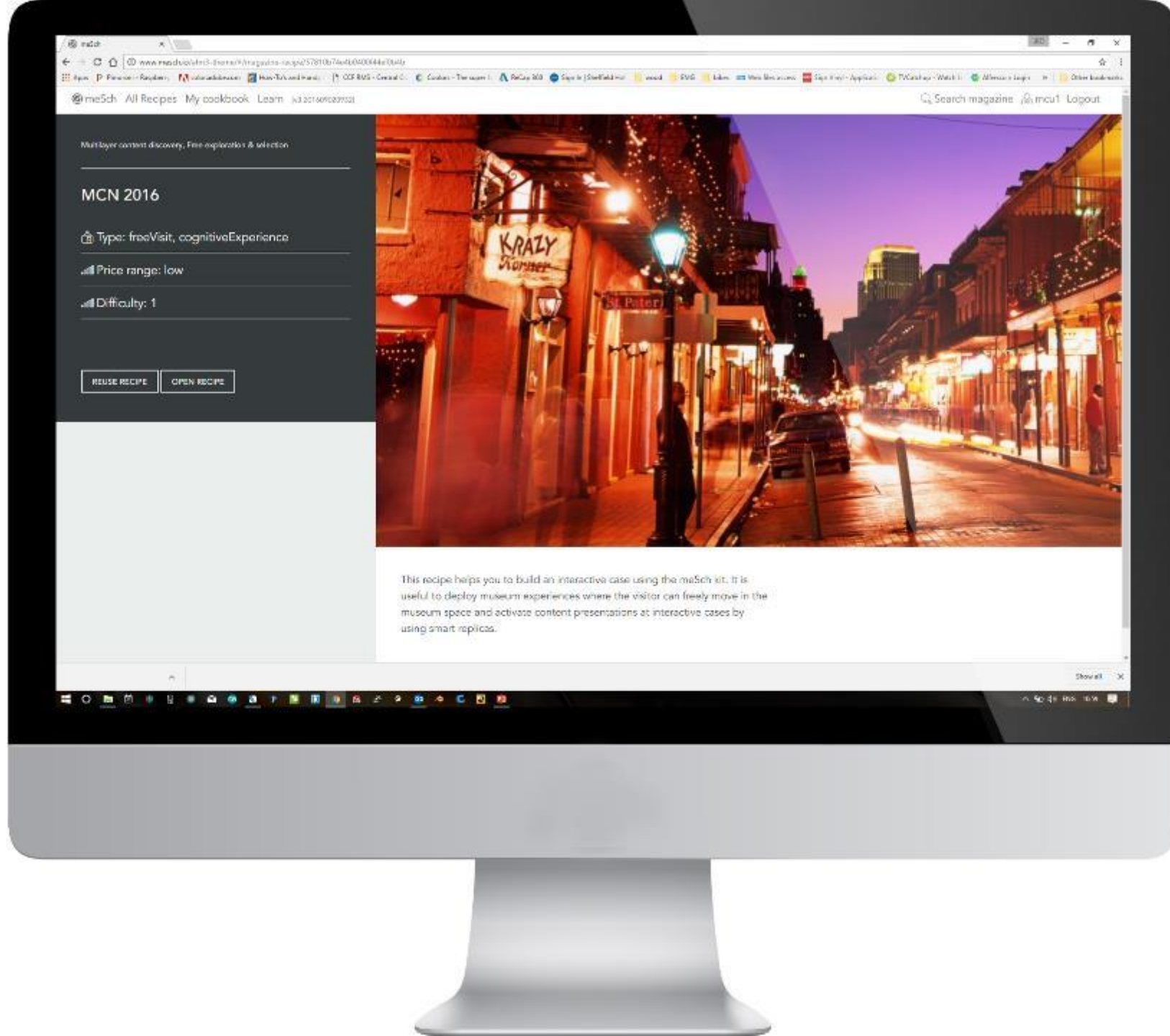


Uso dell'oggetto attivante: il "pebble"

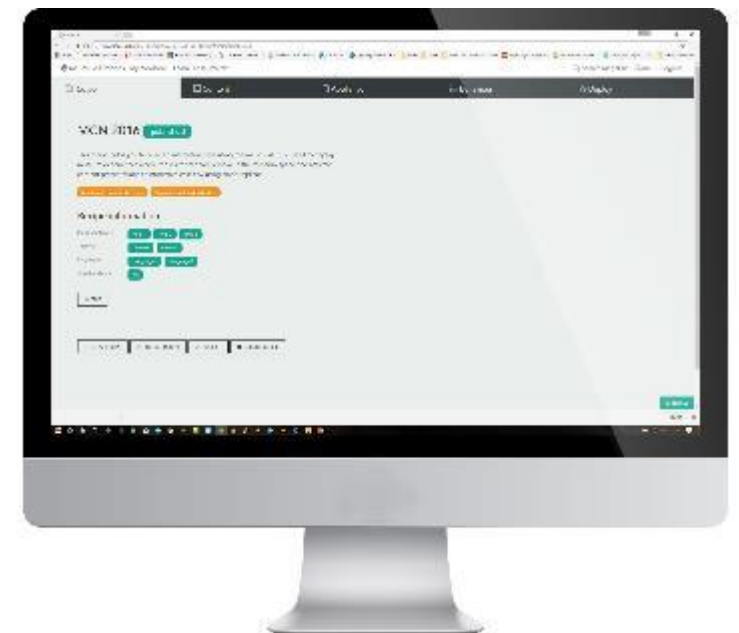
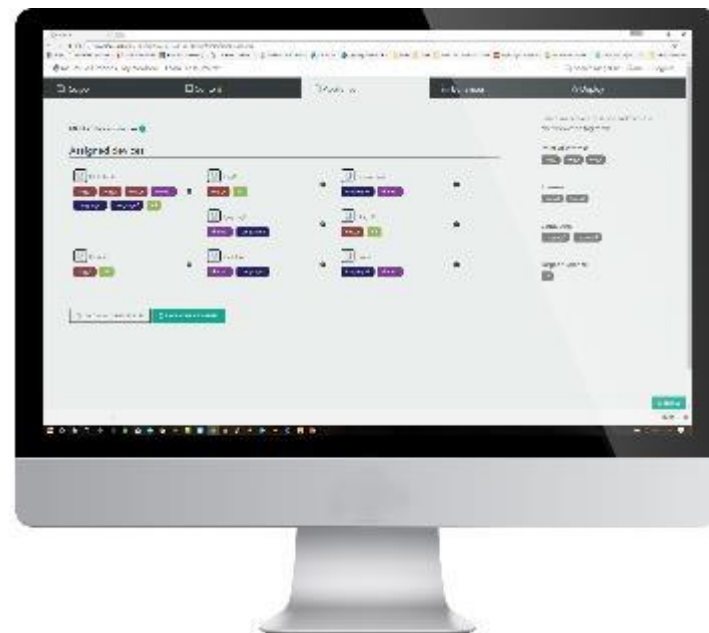
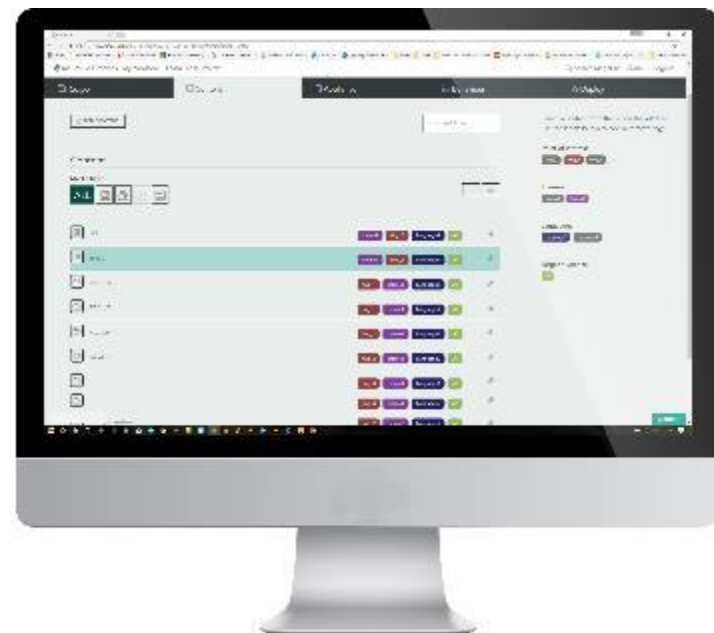
Using an activating object: the "pebble"

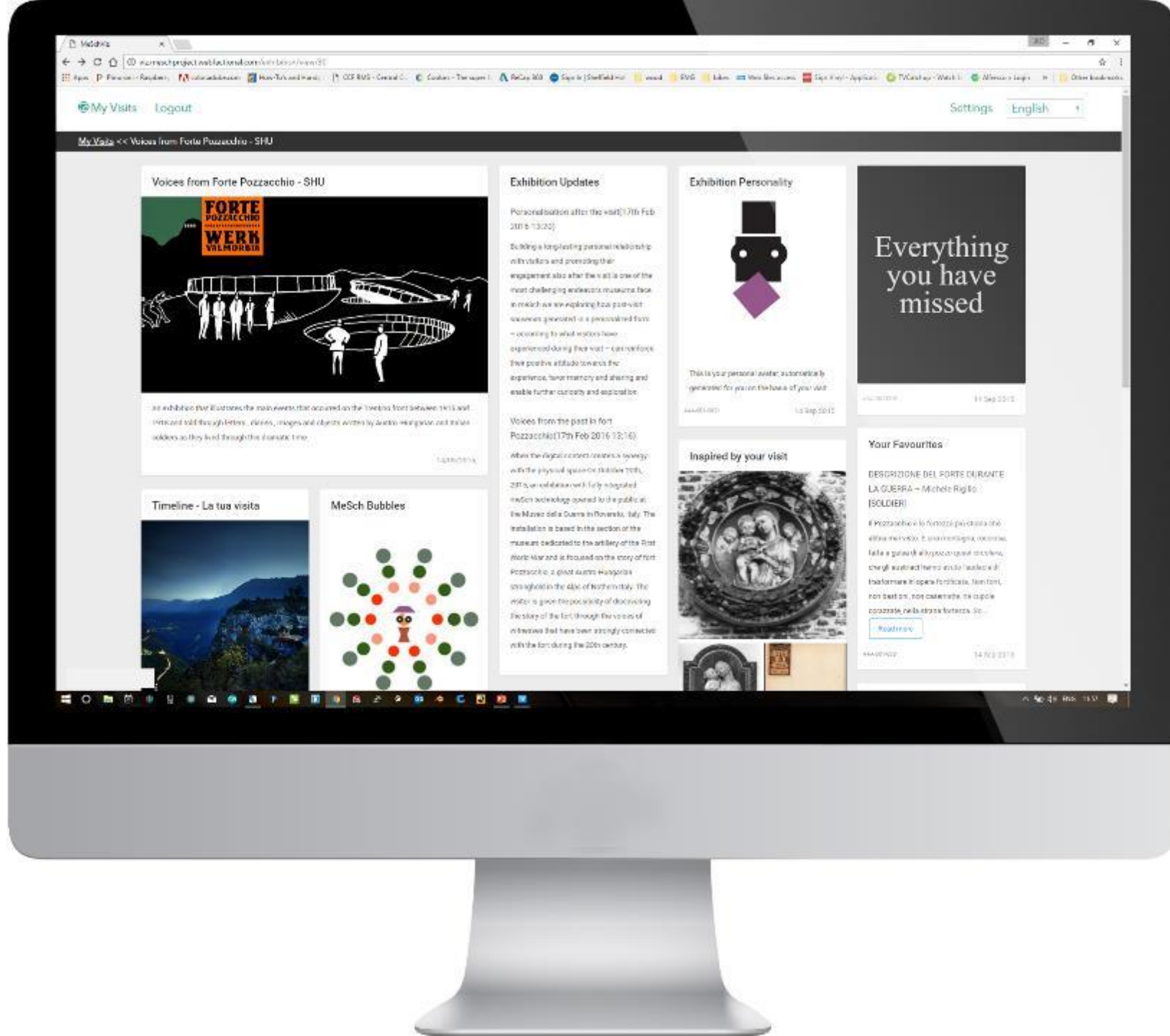
meSch Cloud tool



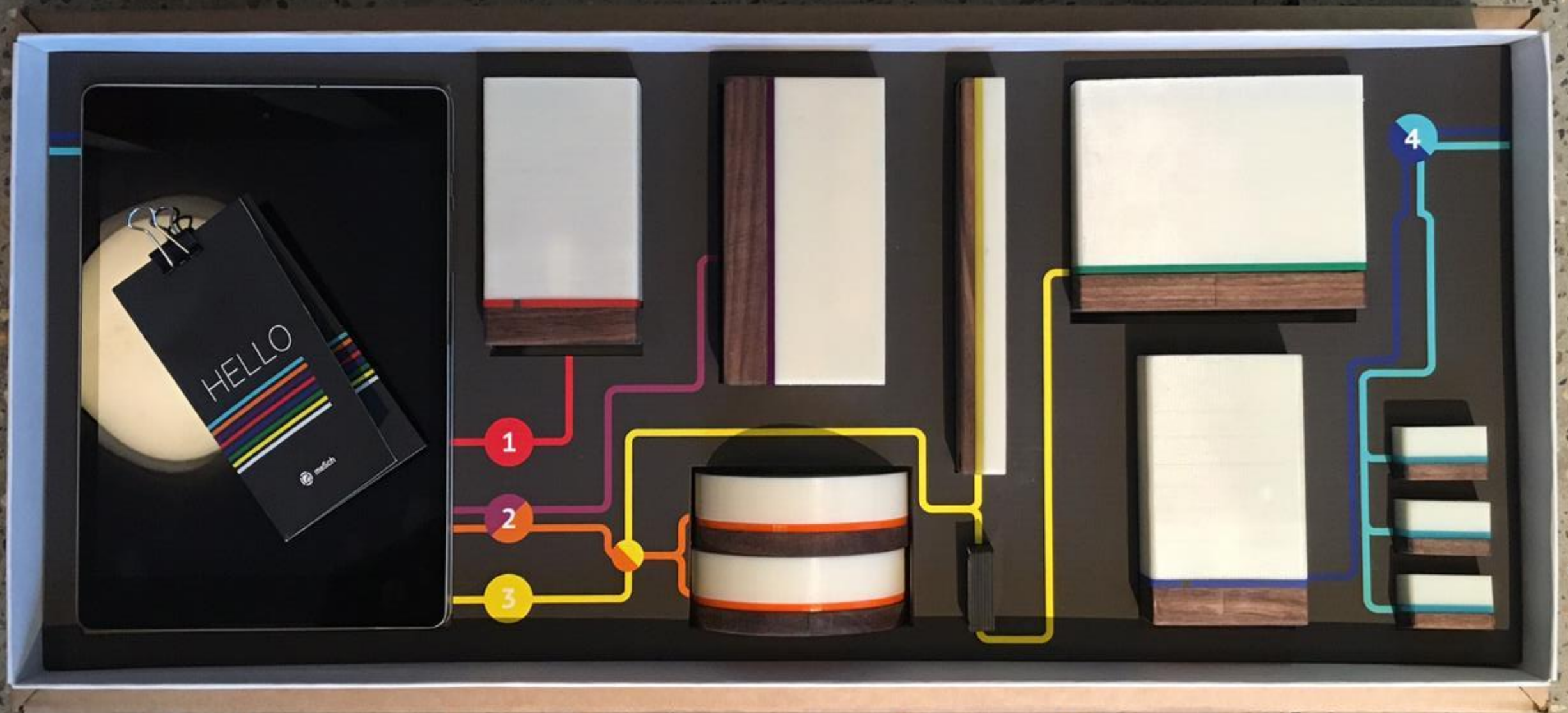




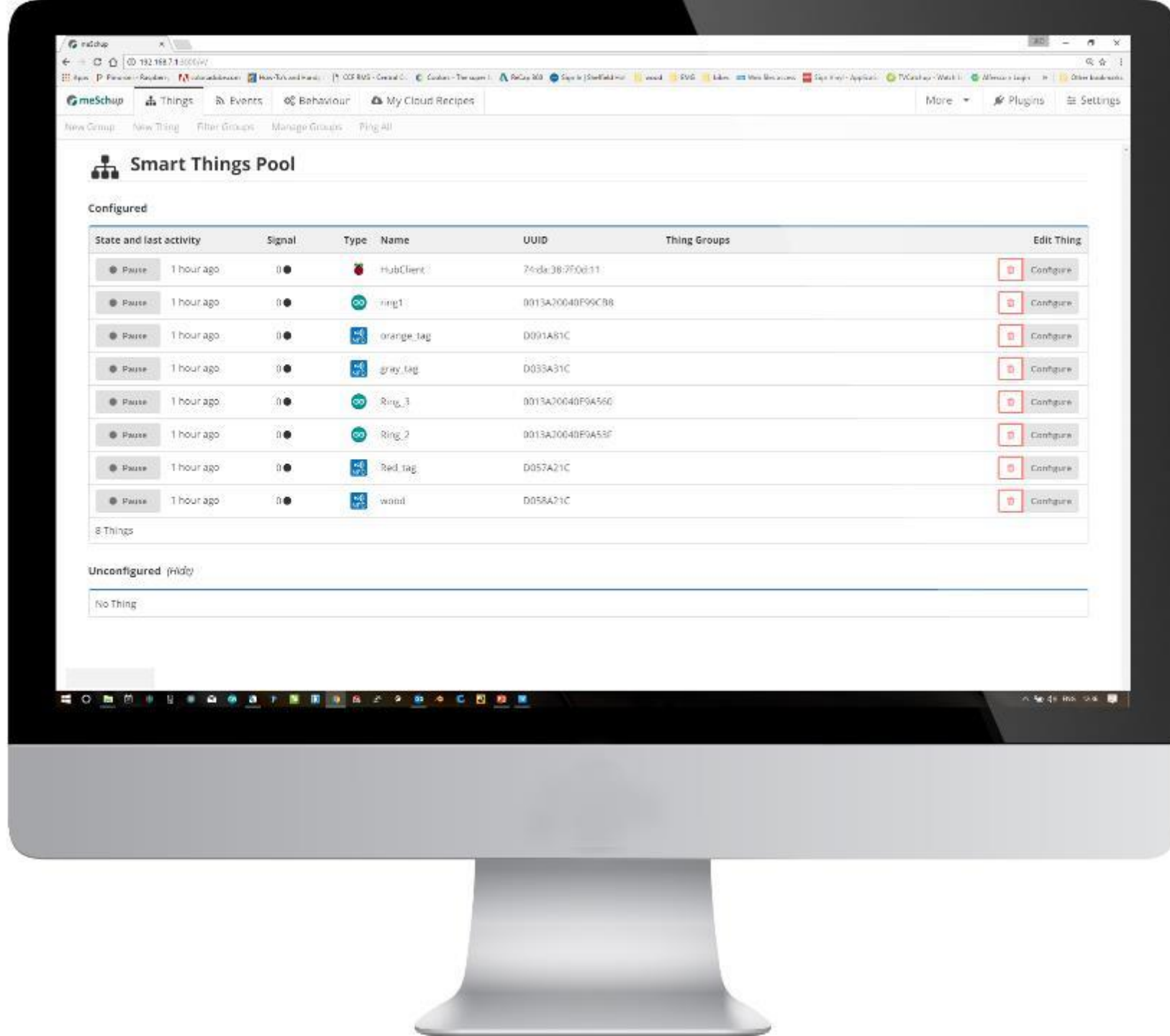




# meSch Kit







Closing





[www.mesch-project.eu](http://www.mesch-project.eu)

@meschproject | #meschfp7

The project (2013-2017) receives funding from the European Community's Seventh Framework Programme 'ICT for access to cultural resources' (ICT Call 9: FP7-ICT-2011-9) under the Grant Agreement 600851.

